

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1. (Currently Amended) An electrode structure-(10) for attachment to a more extensive measuring structure-(11), in order to measure electrical responses from the human body, which electrode structure-(10) includes a conductive electrode-(1), characterized in that wherein

- the electrode-(1) is shaped to be thin in the thickness direction of the electrode structure-(10), and
- the electrode structure-(10) is equipped with a hole-(6) and the electrode-(1) is located at the edge of the hole-(6), in such a way that its longitudinal axis is essentially parallel to the plane of the measurement subject.

2. (Currently Amended) ~~An~~ The electrode structure-(10) according to Claim 1, characterized in that wherein

the electrode-(1) is formed from silver/silver-chloride (Ag-AgCl), in order to form electrically stable interfaces between the measurement subject and the measuring electronics.

3. (Currently Amended) ~~An~~ The electrode structure-(10) according to Claim 1 or 2, characterized in that wherein

the electrode-(1) is ~~thinner~~ thinner than 5 mm and most preferably ~~thinner~~ thinner than 2 mm.

4. (Currently Amended) ~~An~~ The electrode structure-(10) according to Claim 1, 2, or 3, ~~characterized in that wherein~~

the electrode structure-(10) is attached to the measuring structure-(11) using a two-part snap-fit mechanism-(2, 3).

5. (Currently Amended) ~~An~~ The electrode structure-(10) according to ~~any of the above Claims~~ Claim 1, ~~characterized in that wherein~~

the electrode-(1) is connected to the measuring lead-(4) with the aid of a wire-(5) of pure silver (Ag).

6. (Currently Amended) ~~An~~ The electrode structure-(10) according to ~~an of the above Claims~~ Claim 1, ~~characterized in that wherein~~

the electrode structure-(10) is equipped with a hole-(6) and the electrode-(1) is located at the edge of the hole-(6), and that the diameter of the hole-(6) is at least 2 mm, most preferably at least 4 mm.

7. (Currently Amended) ~~An~~ The electrode structure-(10) according to ~~any of the above Claims~~ Claim 1, ~~characterized in that wherein~~

the electrode-(1) is cylindrical and the longitudinal axis of the electrode-(1) is essentially parallel to the plane of the measurement subject.

8. (Currently Amended) ~~An~~ The electrode structure-(10) according to ~~any of the~~
~~above Claims~~ Claim 1, characterized in that wherein

the electrode structure (10) is formed of body part-(2), in which a curved opening
is formed, and a locking part-(3), which locks into the curved opening in the body part
(2).

9. (Currently Amended) ~~An~~ The electrode structure-(10) according to ~~any of~~
~~the above Claims~~ Claim 1, characterized in that wherein

the electrode-(1) is of a small size, so that a cross-section along any plane
whatever of the electrode (1) has a surface area of less than 15 mm^2 , most preferably of
less than 4 mm^2 .

10. (Currently Amended) ~~An~~ The electrode structure-(10) according to ~~any of the~~
~~above Claims~~ Claim 1, characterized in that wherein

the electrode-(1) is manufactured by sintering from a silver/silver-chloride mass
(Ag-AgCl).

11. (Currently Amended) ~~An~~ The electrode structure-(10) according to ~~any of the~~
~~above Claims~~ Claim 1, characterized in that wherein

the structure is thinner than 5 mm, most preferably thinner than 2 mm.

12. (Currently Amended) A measuring cap—(11) for measuring electrical responses from the human body, which measuring cap includes one or more electrode structures—(10) and electrical leads—(4) connected to them for transmitting the measurement results to the measuring equipment, characterized in that wherein

the electrode structures—(10) are according to any Claims 1—10, or to a combination of them.

13. (Currently Amended) A The measuring cap—(11) according to Claim 12, characterized in that wherein

the measuring leads are wound into a tight, preferably spiral bundle, in order to reduce interference.

14. (Currently Amended) A The measuring cap—(11) according to Claim 12 or 13, characterized in that wherein

the earth and reference electrode leads are wound tightly to each other, in order to reduce interference.

15. (Currently Amended) A The measuring cap—(11) according to any of the above Claims Claim 12—14, characterized in that wherein

the measuring leads are run from the electrodes towards the front of the cap, in order to reduce interference.

Claim 16 (Canceled)